



Attorney Docket No. 38150 (10994)

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Technology Center 2600

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of: H. Katayama

Application No.: 09/647,734

Examiner: Not Yet Assigned

Filed: October 4, 2000

Group: 2653

For: MAGNETIC RECORDING MEDIUM AND METHOD OF RECORDING

Commissioner for Patents  
Washington, D.C. 20231

CERTIFICATE OF MAILING

I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to the Commissioner for Patents, Washington, D. C. 20231 on April 23, 2003.

Kathryn A. Grindrod  
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Sir:

ASSOCIATE POWER OF ATTORNEY (37 CFR 1.34)

The undersigned has power of attorney in the above referenced application.

Please recognize the following as an Associate Agent in this case:

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Respectfully submitted,

Date: April 23, 2003

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Office Action

Application No.: 10-092127  
Date Drafted: March 17, 2003  
Examiner: Masaaki KURANO 8721 5D00  
Attorney: Takaya KOIKE  
Applicable Sections: Sections 29(1), 29(2), and 36

The present application is to be rejected for the reasons set forth below. If the applicant has any comments on this Office Action, a response should be filed within 60 days from the mailing date of this Office Action.

Reasons for Rejection

1. The invention recited in the present application in claims 1 to 10 is described in the publication below, which was distributed in Japan prior to the filing of the present application. Therefore, the patent is not granted according to Section 29(1)(iii) of the Japanese Patent Law.

2. The invention recited in the present application in claims 1 to 10 could easily have been made, prior to the filing of the present application, by a person with ordinary skill in the art to which the invention pertains, on the basis of the invention described in the publication below, which was distributed in Japan prior to the filing of the present application. Therefore, the patent is not granted according to Section 29(2) of the Japanese Patent Law.

3. The specification and drawings of the present application do not meet the requirements of Section 36 (4) and (6) in the following respects.

Remarks (For cited references and the like, see

the list of cited references and the like.)

#### Reasons 1 and 2

The magnetic storage medium includes a magnetic recording layer, a superconducting layer, and a layer provided between the magnetic recording layer and the superconducting layer.

To name the layers differently does not constitute a substantive difference.

#### Reason 3

(1) It is described in Claim 5 that "the superconducting layer is partly heated where data is either recorded in recorded or reproduced in reproduction, to or beyond a critical temperature at which diamagnetism disappears." However, it is not clear what kind of device is used to realize this.

First, it is necessary to cool down the magnetic storage medium and the device to such a temperature at which the superconducting layer can be kept superconducting. However, it is not clear what kind of device is used to realize this.

At such a low temperature at which the superconducting layer can be kept superconducting, ordinary magnetic material cannot be used, because a characteristic thereof such as coercive force is changed. However, it is not clear what kind of material is used as the magnetic storage layer.

At this time, it is difficult to even shape material for a superconducting layer into a desired shape. Therefore, it is considered to be almost impossible to manufacture such a magnetic storage medium described in Fig. 1. It is not clear how, specifically, to manufacture the magnetic storage medium.

It is therefore considered that the invention described in claim 5 is not sufficiently disclosed.

(2) Claims and detailed descriptions of the invention are not consistent.

For example, it is not clear how embodiment 1 falls under the category of the embodiment of the present invention.

#### List of Cited References

1. Japanese Publication for Unexamined Patent Application, *Tokukathet*, No. 1-258204

**Record of the Result of Search for Prior Art**

**Field of Search IPC 7<sup>th</sup> edition, G11B 5/62**

**DB name**

**Prior Art**

**This record of search for prior art does not constitute a reason for rejection.**

**At this time, no reason for rejection is found with respect to the invention described in claims other than those pointed out in this Office Action. If a new reason for rejection is found, the reason for rejection shall be notified.**

**If the applicant has any inquiry regarding the contents of this Official Action, he should contact the following address:**

**Patent Examination 4th Division Information Record**

**Telephone number: 03-3581-1101, extension number 3502.**